

\$		DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD	RRRRRRRR RRRRRRRR RR RR RR RR RR RR RRRRRR
	\$		

MIDULE setdir

IDENT = 'V04-000' ADDRESSING\_MODE (EXTERNAL=GENERAL, NONEXTERNAL=LONG\_RELATIVE) ) =

BEGIN

.

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FACILITY:

Set Directory Command

ABSTRACT:

This module processes the Set Directory command.

**ENVIRONMENT:** 

Vax native, privileged user mode

AUTHOR:

Gerry Smith

CREATION DATE: 3-Nov-1981

MODIFIED BY:

V03-007 AEW0001

6-Mar-1984 Anne E. Warner

Add error messages to prevent the use of search lists with devices for directories.

FILSPCSRCH - File specification contains a searchlist NOSRCHLST - Command does not support search lists Both are defined in SHRMSG.MSG.

V03-006 GAS0170

Gerry Smith

23-Aug-1983

	I 16 16-Sep-1984 00:59:34 VAX-11 Bliss-32 V4.0-742 14-Sep-1984 12:09:06 [CLIUTL.SRC]SETDIR.B32;
0058 1 ! 0059 1 ! 0060 1 !	Instead of simply doing an IOS_ACCESS to get the directory's header, perform an actual open, by issuing an IOS_ACCESS OR IOSM_ACCESS, to insure proper file locking by the XQP.
0062 1 0063 1 0064 1	V03-005 GAS0116 Gerry Smith 6-Apr-1983 Use the common qualifier routines.
0066 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	V03-004 GAS0112 Gerry Smith 29-Mar-1983 Fix for the new CLI interface, as well as the new command dispatcher.
0070 1 0071 1	V03-003 GAS0091 Gerry Smith 19-0ct-1982 Change input request for new CLD syntax.
0072 1 0073 1 0074 1 0075 1	V03-002 GAS0026 Gerry Smith 18-Dec-1981 Use shared message file, and lower fatal messages to simple error messages.
0077 1 0078 1 0079 1	V03-001 GAS0024 Gerry Smith 14-Dec-1981 Fix /LOG logic
	0058 1 ! 0059 1 ! 0060 1 ! 0061 1 ! 0062 1 ! 0063 1 ! 0065 1 ! 0065 1 ! 0066 1 ! 0067 1 ! 0070 1 ! 0071 1 ! 0072 1 ! 0073 1 ! 0074 1 ! 0075 1 ! 0076 î ! 0076 î ! 0077 1 ! 0078 1 ! 0079 1 ! 0080 1 ! 008

SETDIR VO4-000

J 16 16-Sep-1984 00:59:34 14-Sep-1984 12:09:06

VAX-11 Bliss-32 V4.0-742 CCLIUTL.SRCJSETDIR.B32;1

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83 84 85

0082 1 LIBRARY 'SYS\$LIBRARY:LIB'; 0083 1 LIBRARY 'SYS\$LIBRARY:TPAMAC'; 0084 1

```
K 16
16-Sep-1984 00:59:34
14-Sep-1984 12:09:06
SETDIR
VO4-000
                                                                                                                                                                                                                      VAX-11 Bliss-32 V4.0-742 CCLIUTL.SRCJSETDIR.B32;1
                                                          FORWARD ROUTINE set$directory : NOVALUE,
                                      Main routine for directory
Get qualifiers and values
                                                                    get_quals,
set_attributes,
get_dir;
                                                                                                                                                                 Routine to set directory attributes
Routine to get each directory
                                                        EXTERNAL ROUTINE

cli$present,
cli$get_value,
lib$qual_file_parse,
lib$qual_file_match,
lib$file_scan,
check_privilege: NOVALUE,
search_error,
file_error,
parse_uic,
lib$tparse,
lib$cvt_dtb.
                                                                                                                                                                Determine presence of qualifier
Get value of qualifier
Get common qualifiers
See if directory matches common quals
Routine to get next directory
Routine to check for privilege
Where to go if file search fails
Where to go if file error occurs
Routine for parsing UIC strings
                                                                                                                                                                 Routine for parsing UIC strings
                                                                                                                                                                 Parser
                                                                    lib$cvt_dtb.
                                                                                                                                                            ! Convert decimal to number ! Formatted ASCII output
                                                                    sys$fao:
                                                              Declare external data
                                                                    setfile$flags : BITVECTOR[32].
                                                                                                                                                                                    Qualifier flags word
Owner UIC
                                                                    uic_value,
                                                                                                                                                                                UIC group number
UIC member number
Version limit
                                                                    group.
                                                                    member.
                                                                    vrsn_value,
                                                              RMS structures
                                                         Error messages
                                                        EXTERNAL LITERAL
libs filfaimat,
libs quipro,
sets facility,
sets closeerr,
sets entered,
sets modified,
sets notdir,
sets notods2,
sets readerr,
sets remerr,
sets removed,
sets writeerr;
                                                                                                                                                                 No match for common quals
                                                                                                                                                               No match for common quals
Quit processing
Facility code
Could not close file
File entered in a directory
Error entering file
File/directory modified
Not a directory
Not an ODS2 structure
Could not read file
Could not remove file
Directory entry removed
                                                                                                                                                                Directory entry removed Could not write to file
```

(3)

Declare the context longword

file\_rlf : \$NAM(),

context;

OWN

Page

(3)

Page (4)

Page

(5)

```
SETDIR
VO4-000
                                                                                                             VAX-11 Bliss-32 V4.0-742 [CLIUTL.SRC]SETDIR.B32;1
                                                                                                                                                         Page
   255555589012345667890123777
Get the command qualifiers.
                              IF NOT get quals()
THEN RETURN;
                                For each directory specified, find the directory and perform the
                                operations requested.
                              $init_dyndesc(dir_desc);
file_fab[fab$l_ctx] = false;
                                                                                 Make the descriptor dynamic
                                                                               ! Initialize for get_dir routine
                              WHILE get_dir(dir_desc)
                              DO
                                  BEGIN
lib$file_scan(
                                                                                 For each directory found Use this fab Go here if directory found Or here if error
                                                    file_fab,
set_attributes,
                                                    search_error)
                                   END:
                              RETURN;
                              END:
                                                                                            .TITLE
                                                                                                     SETDIR
                                                                                                      \V04-000\
                                                                                            .PSECT
                                                                                                     _LIB$STATE$, NOWRT, SHR, PIC,1
                                                                          00000 DIR_STATE::
                                                                          00000 DIRSTART:
                                                                                                     0
                                                                                             BLKB
                                                                          00000 ; TPASTYPE
                                                                   45F4
                                                                                             WORD
                                                                                                     17908
                                                              00000000* 00002 :TPA$ADDR
                                                                                            LONG
                                                                                                     <<GROUP-U.3>-4>
                                                                          00006 ; TPASTYPE
                                                                   042C
                                                                                             WORD
                                                                                                     1068
                                                                                  : TPASTYPE
                                                                          00008
                                                                   55F4
                                                                                             WORD
                                                                                                     22004
                                                              A0000 *000000
                                                                                  : TPASADDR
                                                                                 LONG
U.7:
                                                                                                     <<MEMBER-U.6>-4>
                                                                          0000E
                                                                   FFFF
                                                                                                     -1
                                                                                            .PSECT
                                                                                                     _LIB$KEYO$, NOWRT, SHR, PIC,1
                                                                          00000 DIR_KEYS::
                                                                                                     0
                                                                          00000 :TPASKEYO
                                                                                            .BLKB
                                                                                            .PSECT SOWNS, NOEXE, 2
```

000000006

```
16-Sep-1984 00:59:34
14-Sep-1984 12:09:06
                                                                                 VAX-11 Bliss-32 V4.0-742 [CLIUTL.SRC]SETDIR.B32;1
                                                                                                                                                              Page
                                                                                                                                                                         (5)
                  N900000000
                    00001
00002
00003
00004
00008
00009
00008
00001
00014
00024
00030
00038
00039
00000000
                                                   LONG
LONG
WORD
WORD
00000000
        0000#
        0000#
                                                   LONG
LONG
BYTE
BYTE
00000000
            00
                     0003A
0003B
0003C
0003D
                                                   BYTE.
                                                   .BYTE
                                                    .BYTE
                                                   .BYTE
                     0003E
                                                                    0[2]
                     00040
00044
00048
0004C
00000000
                                                    .LONG
                                                   LONG
LONG
00000000
00000000
00000000
00000000
                                                    .LONG
                     00054
00058
00000000
                                                   .LONG
                                                                    0[2]
00000000#
                                                   .LONG
                     00060 CONTEXT: .BLKB
                                                                   CLISPRESENT, CLISGET_VALUE
LIBSQUAL_FILE_PARSE
LIBSQUAL_FILE_MATCH
LIBSFILE_SCAN, CHECK_PRIVILEGE
SEARCH_ERROR, FILE_ERROR
PARSE_UIC, LIBSTPARSE
LIBSCVT_DTB, SYSSFAO
SETFILESFLAGS, UIC VALUE
GROUP, MEMBER, VRSN_VALUE
FILE_RESULT, FILE_EXPANDED
FILE_NAM, FILE_FAB
LIBS_FILFAIMAT, LIBS_QUIPRO
SETS_FACILITY, SETS_CLOSEERR
SETS_ENTERED, SETS_ENTERR
SETS_MODIFIED, SETS_NOTDIR
SETS_NOTODS2, SETS_READERR
SETS_WRITEERR
                                                   .EXTRN
                                                   .EXTRN
                                                    .EXTRN
                                                    .EXTRN
                                                    .EXTRN
                                                    .EXTRN
                                                    .EXTRN
                                                    .EXTRN
                                                    .EXTRN
                                                   .EXTRN
                                                    .EXTRN
                                                    .EXTRN
                                                    .EXTRN
                                                    .EXTRN
                                                    .EXTRN
                                                    .EXTRN
                                                   .PSECT
                                                                   SCODES, NOWRT, 2
                                                   .ENTRY
SUBL2
CALLS
                                                                                                                                                                  : 0191
                                                                    SET$DIRECTORY, Save nothing #12, SP
                                                                                                                                                                  : 0230
                                                                    #O. CHECK_PRIVILEGE
```

SETD1R V04-000		E 1 16-Sep-1984 00:59:34 VAX-11 Bliss-32 V4.0-742 14-Sep-1984 12:09:06 [CLIUTL.SRCJSETDIR.B32:1	Page 10 (5)
04 000000006 00000000V 04 00000000V	EF 020E0000 08 00000000G 04 000000000 04 0000000000	EF 9F 0000C  8F 3C 00012 AE 9F 00018 02 FB 0001B 50 E8 00022 50 DD 00025 01 FB 00027 04 0002E 00 FB 0002F 1\$: CALLS #1, LIB\$SIGNAL 8F DO 00039 AE D4 00041 00 D4 00044 AE 9F 00040 AE 9F 00050 01 FB 00027 AE D4 00041 00 D4 00044 AE 9F 00040 CLRL DIR DESC+4 AE 9F 00040 CLRL FILE FAB+24 AE 9F 00050 D0 9F 00057 EF 9F 00050 D0 9F 00057 EF 9F 00050 D0 9F 00063 O0 9F 00063	0235 0242 0235 0245 0246 0251 0258 0259 0261 0264

; Routine Size: 115 bytes, Routine Base: \$CODE\$ + 0000

VAX-11 Bliss-32 V4.0-742 CCLIUTL.SRCJSETDIR.B32:1

```
ROUTINE get_quals =
  This routine interrogates the CLI for qualifiers and values. If an
  error occurs, it is signaled and control is returned with a value of
 FALSE.
BEGIN
LOCAL
    status,
desc : $BBLOCK[dsc$c_s_bln];
                                                  ! General descriptor
$init_dyndesc(desc);
                                                  ! Make it dynamic
  Get the simple flags first.
setfile$flags[qual_log] = cli$present(%ASCID 'LOG');
  /OWNER_UIC
IF clispresent(%ASCID 'OWNER_UIC')
THEN
    BEGIN
    setfile$flags[qual_owner] = 1;
                                                  ! If present, set bit
  If no value on /OWNER_UIC, then call GETJPI to get this process's UIC.
    IF NOT cli$get_value(%ASCID 'OWNER_UIC', desc)
    THEN
        BEGIN
        LOCAL
        iosb : VECTOR[4,WORD];
status = $GETJPIW(ITMLST = UPLIT(WORD(4,jpi$_uic),
                                           uic_value,
                            IOSB = iosb);
        If .status
        THEN status = .iosb[0];
        IF NOT .status
        THEN
             BEGIN
             SIGNAL (.status);
             RETURN false:
            END:
        END
  Otherwise, assume a real UIC. Parse the string.
    ELSE
        BEGIN
         If NOT (status = parse_uic(desc, uic_value))
        THEN
```

```
SETDIR
VO4-000
                                                                                                       VAX-11 Bliss-32 V4.0-742 [CLIUTL.SRC]SETDIR.B32:1
                                                                                                                                                        (6)
                                          SIGNAL(set$_syntax, 1, desc);
                                          RETURN false;
                                          END:
                                 END:
                              Now for the version limit.
                            If cli$present(%ASCID 'VERSION_LIMIT')
THEN
                                BEGIN
setfile$flags[qual_vrsn] = 1;
vrsn_value = 32767;
                                                                                       Show that /VERSION specified
                                                                                       Set to the default
                                 IF clisget_value(%ASCID 'VERSION_LIMIT', desc)
                                 THEN
                                     vrsn_value)
                                      THEN
                                          SIGNAL(set$_syntax, 1, desc);
RETURN false;
                                          END:
   360
361
362
363
364
365
3667
                                     IF .vrsn_value LSS 0
OR .vrsn_value GIR 65535
                                      THEN (SIGNAL(sets_valerr); RETURN false);
                                     END:
                                 END:
                            RETURN true;
                            END:
                                                                                       .PSECT $PLIT$, NOWRT, NOEXE, 2
                                                                      00000 P.AAB:
                                                                                                \L06\<0>
17694723
                                                           010E0003
                                                                       00004
                                                                             P.AAA:
                                                                                       .LONG
                                                           00000000
                                                                      80000
                                                                                       .ADDRESS P.AAB
                                                                       0000C
                                                                             P.AAD:
                                                                                                \OWNER_UIC\<0><0><0>
17694729
                                                                                       .ASCII
                                                                      00018
00010
                                                           010E0009
                                                                             P.AAC:
                                                           0000000
                                                                                       .ADDRESS P.AAD
                                                                                                \OWNER_UIC\<0><0><0>
17694729
                                               52 45
                                                                             P.AAF:
                                                                                       .ASCII
                                                           010E0009
                                                                             P.AAE:
                                                                                       ADDRESS P.AAF
                                                           00000000
                                                        0304 0004
                                                                             P.AAG:
                                                           0000000G
                                                                                       .ADDRESS UIC_VALUE
                                                          00000000
                                               00000000
                                                                             P.AAI:
                                                                                                VERSION_LIMIT\<0><0><0>
                                                                                       .ASCII
                                                           010E0000
000000000
45 56
                                                                                       .LONG
                                                                                               17694733
                                                                                       .ADDRESS P.AAI
                                                                                       .ASCII \VERSION_LIMIT\<0><0><0>
```

				H 1 16-Sep-19 14-Sep-19	084 00:59 084 12:09	9:34 VAX-11 Bliss-32 V4.0-742 0:06 [CLIUTL.SRC]SETDIR.B32:1	Page 13 (6)
		01 00	000000 0	006C P.AAJ:	.LONG	17694733 S P.AAK	:
					.EXTRN	SYS\$GETJPIW	
					.PSECT	\$CODE\$,NOWRT,2	
			00FC 0	0000 GET_QUA	LS:	Saura D2 D3 D4 D5 D4 D7	. 0272
		57 000000006 56 000000006 55 000000006 54 000000006 53 000000006 52 000000000	00 9E 0 00 00 00 00 00 00 00 00 00 00 00 00 0	0002 0009 0010 0017 001E 0025 002F 0037 003A 003F 0044 0044 0040 0050 0050 0056 0056 0056	WORD MOVAB MOVAB MOVAB MOVAB SUBL2 MOVL CLRL PUSHL CALLS INSV PUSHAB CALLS BLBC BISB2 PUSHAB PUSHAB	Save R2,R3,R4,R5,R6,R7 LIB\$SIGNAL, R7 CLI\$GET VALUE, R6 VRSN VALUE, R5 SETFILE\$FLAGS, R4 CLI\$PRESENT, R3 P.AAA, R2 #16, SP #34471936, DESC	0272
	08	AE 020E0000	8F DO 0	002F 0037	CLRL		0286
64	01	63 02 63	52 DD 0 01 FB 0 50 F0 0 A2 9F 0 01 FB 0	003A 003C 003F 0044 0047	PUSHL CALLS INSV PUSHAB CALLS	DESC+4 R2 W1. CLISPRESENT R0. W2. W1. SETFILESFLAGS P.AAC W1. CLISPRESENT	0291
		63 42 64 08 28	01 FB 0 08 88 0 08 9F 0 02 FB 0 02 FB 0 7E 7C 0 7E 7C 0	004A 004D 0050 0053 0056	BLBC BISB2 PUSHAB PUSHAB CALLS	#1, CLISPRESENT RO. 3\$ #8, SETFILESFLAGS DESC P.AAE #2, CLISGET_VALUE	0299 0303
		08 30	AE DD 00 00 00 00 00 00 00 00 00 00 00 00	0059 005C 005E 0061 0064	CALLS BLBS CLRQ PUSHAB PUSHAB CLRQ	#2, CLISGET_VALUE R0, 2\$ -(SP) 10SB P.AAG -(SP)	0312
	0000000G	00 06 50 17	7E D4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0066 0068 006F 0072 0075 0078 1\$:	CLRL CALLS BLBC MOVZWL BLBS PUSHL	-(SP) #7, SYS\$GETJPIW STATUS, 1\$ IOSB, STATUS STATUS, 3\$ STATUS 75	0313 0314 0315 0318
	000000006	00000000G 00 30	67 11 0 00 9F 0 AE 9F 0 02 FB 0	007A 007C 2\$: 0082 0085	PUSHAB PUSHAB CALLS	7\$ UIC_VALUE DESC #2. PARSE_UIC	0327
		50	A2 9F 0	008f 3\$: 0092	PUSHAB	P.AAH #1, CLISPRESENT	0339
		63 50 64 65 7FFF 08 68	9F 00 9F 00	0068 0067 0072 0075 0078 007A 007C 0082 0085 0085 0086 0095 0095 0098 0098 0098 0098 0098 0098 0098 0098 0098 0098 0098 0098 0098 0098 0098	CALLS BLBC MOVZWL BLBS PUSHL BRB PUSHAB CALLS BLBC PUSHAB CALLS BLBC BISB2 MOVZWL PUSHAB PUSHAB CALLS BLBC PUSHAB CALLS BLBC PUSHAB CALLS BLBC CALLS CALLS	UIC_VALUE DESC #2, PARSE_UIC STATUS, 4\$ P.AAH #1, CLI\$PRESENT R0, 8\$ #16, SETFILE\$FLAGS #32767, VRSN_VALUE DESC P.AAJ #2, CLI\$GET_VALUE	0342 0343 0344
		66 30	50 E9 0	00A9 00AC	BLBC PUSHL PUSHL	#2. CLISGET_VALUE RO, 8\$ R5 DESC+4 DESC, -(SP) #3, LIB\$CVT_DTB	0347 0348 0347
	000000006	7E 10	AE 3C 0 03 FB 0	00B1 00B5	MOVZWL	DESC(SP) #3, LIBSCVT_DTB	0347

SETDIR V04-000					I 1 16-Sep- 14-Sep-	1984 00:59 1984 12:09	9:34 VAX-11 Bliss-32 V4.0-742 9:06 [CLIUTL.SRCJSETDIR.B32;1	Page 14 (6)
		10 08 007710FA	50 AE 01 8F	68 95 00 00 68	000C2	BLBS PUSHAB PUSHL CALLS BRB MOVL BLSS CMPL BLEQ PUSHL CALLS BRB MOVL RET CLRL RET	RO. 5\$ DESC #1 #7803130	0352
		50	03 10 65	11 00 19	000C4 000CD 000CF 000D2 000D4 000DB 000DD 6\$: 000E3 7\$:	BRB MOVL	#7803130 #3, LIB\$SIGNAL 9\$ VRSN_VALUE, RO	0353 0355
	0000FFFF	8F	50	D1	00004	CMPL	RO, #65535	0356
		67 007711EA	09 50 08 8F 01	PB 11	000DD 6\$: 000E3 7\$:	PUSHL	6\$ R0, #65535 8\$ #7803370 #1. LIB\$SIGNAL	0357
		50	04	00	000E8 8\$:	MOVL	#1, RO	0361
			50	04	000E8 8\$: 000EB 000EC 9\$: 000EE	CLRL	RO	0362

; Routine Size: 239 bytes, Routine Base: \$CODE\$ + 0073

Page

```
ROUTINE set_attributes (fab) =
This is the routine that accesses the directory and sets the specified attributes. If an error occurs while attempting to set
                           the attributes, a message telling the user is issued, and any other
                           directories are processed.
                        BEGIN
                             fab : REF $BBLOCK;
                                                                       ! Define the fab
                        LOCAL
                             atr : BLOCKVECTOR[3,8,BYTE],
                                                                         Attribute control block
                                                                         Pointer to attribute block
                             ptr,
status,
                                                                         Status return
                             channel: WORD,
desc: $BBLOCK[dsc$c_s_bln],
dir_desc: $BBLOCK[dsc$c_s_bln],
string: VECTOR[nam$c_maxrss,BYTE],
fib: $BBLOCK[fib$c_extdata],
header: $BBLOCK[512],
                                                                         Channel number
                                                                                   General descriptor
                                                                         Descriptor for directory
                                                                         String to build directory
A FIB for the QIO
                                                                          The file header
                             iosb : VECTOR[4, WORD];
                                                                         1/0 status block
                        BIND
                             recattr = header[fh2$w_recattr] : $BBLOCK[atr$s_recattr],
                             nam = .fab[fab$l_nam] : $BBLOCK;
                                                                       ! Define the name block
                         If .setfile$flags[qual_quit]
               0395
0396
0397
0398
0399
                         THEN RETURN true;
                          Build a descriptor to point to the directory.
               CH$MOVE(.nam[nam$b_rsl],
                                                                                   Move this many characters
                                                                                   from the nam
                                  .nam[nam$l_rsa],
                                                                                   To the temp string
                                  string);
                         dir_desc[dsc$a_pointer] = string;
                                                                                   Point to the string
                                                                                   fill in the size
                         dir_desc[dsc$w_length] = .nam[nam$b_rsl];
                           Move the final bracket over, to get the name of the final directory
414
                         string[.nam[nam$b_dev]
                                 + .nam[nam$b_dir]
                                 + .nam[nam$b_name]] = .string[.nam[nam$b_dev]
416
417
418
419
420
421
423
424
425
                                                                    + nam[nam$b_dir]
                        string[.nam[nam$b_dev] + .nam[nam$b_dir] - 1] = '.';
                                                                       ! Replace bracket with dot
                        If the directory looks like [000000.something], get rid of the leading
```

VAX-11 Bliss-32 V4.0-742 [CLIUTL.SRC]SETDIR.B32;1

```
SETDIR
VO4-000
0444
0445
0446
0447
0448
                                                                                   0450
0451
0451
0453
0453
0456
0457
0458
0465
0466
0467
0477
0477
0477
0476
```

```
zeroes and dot.
  NOT CHSFAIL (status = CHSFIND_SUB(.dir_desc[dsc$w_length],
                                    .dir_desc[dsc$a_pointer],
                                   UPLIT('000000')))
THEN
   dir_desc[dsc$w_length] = .dir_desc[dsc$w_length] - 7;
END;
 Check to see if this directory file matches the requested qualifiers
status = lib$qual_file_match(context,
                                                ! Call the common qualifier routine
                                                ! fab for directory
                             fab,
                            XASCID 'Modify !AS? [N]: ',
                             %REF(dir_desc));
                                         If the status is false, check what kind of "error"
IF NOT .status
THEN
    BEGIN
      .status EQL libs_filfaimat
                                        ! If no match, return
    THEN RETURN true
   ELSE IF .status EQL libs_quipro
                                       ! If quit-right now,
       BEGIN
        setfile$flags[qual_quit] = 1;
                                       ! set a flag
! and leave
        RETURN true;
        END
   ELSE
                                       ! For any other error,
        BEGIN
        SIGNAL (.status);
                                        ! signal it and
                                        ! go away
        RETURN true:
       END;
   END:
 Assign a channel to the file's device
desc[dsc$w_length] = .nam[nam$b_dev];
                                         Set up the descriptor
desc[dsc$a_pointer] = .nam[nam$[_dev];
                                       ! to point to the device name
IF NOT (status = $ASSIGN(
                        DEVNAM = desc.
                        (HAN = channel))
THEN
    file_error( set$_openin,
                .status,.fab);
                                         Tell user why the assign failed
    RETURN true;
                                        ! And continue with other files
    END:
```

```
Access the directory, reading its header
            desc[dsc$w_length] = fib$c_extdata;
desc[dsc$a_pointer] = fib;
                                                                      ! Re-use descriptor to point to fIB
            CH$FILL(0,fib$c_extdata,fib);
                                                                       ! Zero out the FIB
           ! Set up the FIB
            fib[fib$w_fid_num] = .nam[nam$w_fid_num];
fib[fib$w_fid_seq] = .nam[nam$w_fid_seq];
fib[fib$w_fid_rvn] = .nam[nam$w_fid_rvn];
                                                                                  ! Put in the file id
0491
0493
0494
0495
0496
0497
0498
0500
0501
0502
0503
           atr[0,atr$w_type] = atr$c_header;
atr[0,atr$w_size] = atr$s_header;
atr[0,atr$l_addr] = header;
atr[1,0,0,32,0] = 0;
                                                                                  ! Get the file header
            status = $010W( CHAN = .channel,

FUNC = IO$_ACCESS OR IO$M_ACCESS,

IOSB = iosb,
                                                                                  ! Access the file, reading
                                                                                             ! the file header
                                   P1 = desc,
                                   P5 = atr);
            If .status THEN status = .iosb[0];
If NOT .status
THEN file_error(set$_readerr,.status,.fab)
                                                                                  ! If there was an error,
                                                                                  ! tell the user what it was
            ELSE
                 BEGIN
              Check to see that this is a directory file. This check is only good for an ODS2 volume.
                  IF .header[fh2$b_struclev] EQL 2
AND NOT .header[fh2$v_directory]
                  THEN
                       BEGIN
                       desc[dsc$w_length] = .nam[nam$b_rsl];
desc[dsc$a_pointer] = .nam[nam$l_rsa];
SIGNAL (set$_writeerr,
                                                                                              ! Error writing to
                                                                                              ! This file
                                   desc.
                                                                                              ! for this reason
                                   sets_notdir);
                       END
                 ELSE
                        BEGIN
               See what qualifiers were set. Build the attribute control blook
                       ptr = 0;
                                                                      ! Nothing on control block
                        If .setfile$flags[qual_vrsn]
                        THEN
```

```
SETDIR
VO4-000
                                                                                               16-Sep-1984 00:59:34
14-Sep-1984 12:09:06
                                                                                                                                   VAX-11 Bliss-32 V4.0-742
[CLIUTL.SRC]SETDIR.B32;1
                                                      BEGIN
    Change the version limit for the directory
                                                     atr[0,atr$w_type] = atr$c_recattr;
atr[0,atr$w_size] = atr$s_recattr;
atr[0,atr$l_addr] = recattr;
recattr[fat$w_versions] = .vrsn_value;
ptr = .ptr + T;
END;
                                                                                                                       ! Update the pointer
                                               If .setfile$flags[qual_owner]
THEN
                                                     BEGIN
                                      Change the owner uic
                                                     atr[.ptr.atr$w_type] = atr$c_uic;
atr[.ptr.atr$w_size] = atr$s_uic;
atr[.ptr.atr$l_addr] = uic_value;
ptr = .ptr + 1;
                                                                                                                       ! Update the pointer
                                                      END:
                                      Look to see if the pointer has been changed. If yes, modify the header.
                                               IF .ptr NEQ 0 THEN
                                                     BEGIN
                                                     atr[.ptr,0,0,32,0] = 0;
status = $010W( CHAN = .channel,
func = IO$ MODIFY,
IOSB = iosb,
                                                                                                           ! Put a zero at end of list ! Make the modifications
                                                                             P1 = desc.
P5 = atr);
                                                     IF .status THEN status = .iosb[0];
IF NOT .status ! If th
THEN file_error(set$_writeerr,.status,.fab)
                                                                                                           ! If the modify failed, tell user
                                                     ELSE
                                                     ! If /LOG, tell user
                                                                                                                       ! Deaccess the file
                                                              P1 = desc);
                                                     END:
                                                                                                              End of header modify
                                               END:
                                                                                                           ! End of qualifier scan
                                      Deassign the channel
                                          IF NOT (status = $DASSGN(CHAN = .channel))
                                          THEN file_error(set$_closeerr, .status, .fab);
                                          END:
                                    RETURN true;
                                   END:
```

SETDIR VO4-000						N 1 16-Sep-1984 00:59:34 VAX-11 Bliss-32 V4.0-74 14-Sep-1984 12:09:06 [CLIUTL.SRC]SETDIR.B32;	Page 19 (7)
5D 4E	5B i	20 3F 53	41	00 00 30 21 20 79	30 30 30 30 56 69 64 6F 50 00 00 20 010E00 000000	.EXTRN SYSSASSIGN, SYSSOIDW .EXTRN SYSSDASSGN .PSECT SCODES, NOWRT, 2	
					0	C 00000 SET_ATTRIBUTES:	010 011 0747
Do	СВ	FED8	O3 CD	04 BA 04 BA DC AA DC AA DB AA FED7 CD44 00000000° E	FED8 CD 03 A6 03 A6 39 A6 38 A6 51 38 A6 50 FED7 CD40	C 00000 SET_ATTRIBUTES: WORDWO	R10,R11 0363 0392 0394 0400 0403 0404 0409 0410 0417 0425
			50	5	03 06 02 73 18 57 1 08 AD 51 07 57	A 0002B 1\$: MOVZBL 3(R6), R0 8 0002F E 00036 MOVAB STRING, DIR DESC+4 B 0003C MOVZBW 3(R6), DIR DESC A 00041 MOVZBW 57(R6), R0 A 00045 MOVZBL 58(R6), R1 A 00045 MOVZBL 58(R6), R1 A 00046 MOVZBL 59(R6), R1 A 00050 MOVZBL 70, R1 MOVB STRING-1[R0], STRING[R1] MOVB STRING-1[R0], STRING[R1] MOVB W46, STRING-1[R0] ADDW3 W1, R1, DIR DESC MATCHC W6, P.AAL, DIR DESC, aDIR DESC MOVL W6, R3 CO0077 SS: SUBL2 W2, R3 CO0077 WOVZWL DIR DESC, RT MOVAL -(R3), STATUS BE 2L 3\$ SUBL3 STATUS, DIR DESC+4, R0 MOVZWL DIR DESC, RT ADDL2 R1, R0 SUBL2 W7, R0 O008B SUBL2 W7, R0 O008B SUBL2 W7, R0 O008B SUBL2 W7, DIR DESC BO0096 SS: MOVAB DIR DESC BO0096 SS: MOVAB DIR DESC CO0097 PUSHL SP PUSHAB P.AAM CLRL -(SP) PUSHAB PUSHAB CONTEXT	0429 0430 0431 0432 0442 0442 0438 0439 0438

						16-Sep-19	984 00:59 984 12:09	9:34 VAX-11 Bliss-32 V4.0-742 0:06 [CLIUTL.SRC]SETDIR.B32;1	Page 20 (7)
		0000000G	00	05 50	FB	000B0 000B7	CALLS	#5, LIBSQUAL_FILE_MATCH	
	***	0000000G	1F 8F	05 50 57 57	FD8131281DB180CFFB08DD10EC	000B0 000B7 000BA 000BD 000C4 000C6 000CD 000CF 000D2 000D4 4\$: 000D6 000D9 5\$:	MOVL BLBS CMPL	STATUS, 65 STATUS, #LIBS_FILFAIMAT	0444
		0000000G	8F	13	01	00006	BEQL	STATUS, #LIBS_QUIPRO	: 0449
			69	05 02 05 57	88	000CF 000D2	BNEQ BISB2 BRB	#2. SETFILESFLAGS	0452
			6A	01	DD FB	000D4 4\$: 000D6	PUSHL	STATUS #1 LIB\$SIGNAL 19\$	: 0457
		E0 E4	AD AD	39 A6 44 A6	9B	000D9 5\$: 000DC 6\$:	MOVZBW	57(R6), DESC	0458
			nu	7E	7C	000E1 000E6 000E8 000EB 000EE 000F5 000F8	MOVL CLRQ PUSHAB	68(R6), DESC+4 -(SP) CHANNEL	0466
		000000006	00 57	OC AE EO AD 04	9F FB	000EB 000EE	PUSHAB	DESC	
			0B 7E	50 57 57	D0 E8	000F5 000F8	MOVL BLBS MOVQ	#4, SYS\$ASSIGN RO, STATUS STATUS, 7\$ STATUS, -(SP) #7803034	0/7/
				0077109A 8F	DD 11	000FE 00104	PUSHL	#7803034 9\$	0474
20	00	E0 E4	AD AD	0077109A 8F 69 20 FEB8 CD 00	9E	00106 7\$: 0010A 00110	BRB MOVW MOVAB	9\$ #32, DESC FIB, DESC+4 #0, (SP), #0, #32, FIB	0481 0482
20	00		6E CD	FEB8 CD 0501 8F		00115	MOVC5		0484
		FEBC FECO E8 EC	CD	24 A6	300 B00 964 970	0011F 00125 0012B 00133 0013B 0013D 00140 00142	MOVZWL MOVL MOVW	#1281, FIB 36(R6), FIB+4 40(R6), FIB+8 #655872, ATR HEADER, ATR+4	0487 0490 0492
		E8 EC	AD	000A0200 8F	DO 9E	0012B 00133	MOVL MOVW MOVL MOVAB	#655872, ATR HEADER, ATR+4	: 0495
				10 AE FO AD 7E E8 AD	04 04	00138 0013B	CLRL CLRL PUSHAB	ATR+8 -(SP) ATR	0497
				7E 7E	7C	00142	CLRQ	-(SP) -(SP)	
				EO AD	9F 7C	00144 00147	PUSHAB	DESC -(SP)	
			7E 7E	EO AD 7E 28 AE 72 8F 2C AE 7E 0C 50 57 08 AE 57 57	9A	00149 0014C 00150	CLRQ CLRL PUSHAB CLRQ PUSHAB MOVZBL MOVZWL CLRL CALLS MOVL BLBC MOVZWL RLRS	10SB #114, -(SP) CHANNEL -(SP)	
				7E	D4 FB	00154 00156	CLRL	-(SP) #12, SYS\$QIOW	
			97	50	DO E9	00159 0015C	MOVL BLBC	RO, STATUS STATUS, 8\$	0504
			6B 57 07 57 0C 7E	08 AE 57 57	E8	00163 00166 8\$:	BLBS MOVQ	CHANNEL, -(SP) -(SP) #12, SYS\$QIOW RO, STATUS STATUS, 8\$ IOSB, STATUS STATUS, 10\$ STATUS, -(SP) #SET\$_READERR 18\$	0505
				00000000G 8F	DD 31	00169 0016F 9\$: 00172 10\$:	PUSHI	#SETS_READERR	
	21	,,,	02	17 AE 26	12	00172 10\$: 00176	BRW CMPB BNEQ BBS MOVZBW	115	0513
	21	45 E0 E4	AE AD AD	17 AE 26 05 03 A6 04 A6 00000000 8F	D4FCFAC4B09C8DD112OB0D	00144 00147 00149 00140 00150 00154 00156 00157 00166 00167 00167 00172 00178 00170 00182 00187	MOVZBW MOVL	#5, HEADER+53, 11\$ 3(R6), DESC 4(R6), DESC+4 #SET\$_NOTDIR	0514 0517 0518 0519
				00000000 8F	DD	00187	PUSHL	#SETS_NOTDIR	: 0519

					16-Sep- 14-Sep-	1984 00:59 1984 12:09	:34 VAX-11 Bliss-32 V4.0-742 :06 [CLIUTL.SRC]SETDIR.B32;1	Page 21 (7)
17	. E8	6A 69 AD AD	00040020	AD 90 8F 04 8F 04 8F 05 04 8F 05 05 05 05 05 05 05 05 05 05 05 05 05 0	F 0018D D 00190 D 00192 B 00198 1 0019B 4 0019E 11\$: 1 001AO 0 001A4 E 001AC	PUSHAB PUSHL PUSHL CALLS BRW CLRL BBC MOVL MOVAB	DESC #1 #SET\$ WRITEERR #4, LIB\$SIGNAL 17\$ PTR #4, SETFILE\$FLAGS, 12\$ #262176, ATR RECATTR, ATR+4 VRSN_VALUE, RECATTR+30	0513 0530 0532 0540 0541 0542 0543 0546
18	42	AE 69 9E	00000000G EA AI E8 AI	15 B	0 00163	MOVW INCL BBC PUSHAQ MOVW PUSHAQ	#3, SETFILESFLAGS, 13\$	0542 0543 0546 0552
		9E 9E	00000000G	04 B	0 001CA F 001CD E 001D1 6 001D8 3 001DA 135:	MOVW PUSHAQ MOVAB INCL BEQL PUSHAQ	#21, a(SP) + ATR[PTR] #4, a(SP) + ATR+4[PTR] UIC_VALUE, a(SP) + PTR 17\$ ATR[PTR]	0554 0555 0561
			E8 E0		4 001E0 4 001E2 F 001E4 C 001E7 4 001E9	CLRL CLRL PUSHAB CLRQ CLRL	a(SP)+ -(SP) ATR -(SP) -(SP)	0564
		7E	28 20	7E 7 AE 9 36 DI AE 3	C 001EE F 001F0 D 001F3 C 001F5 4 001F9	PUSHAB CLRQ PUSHAB PUSHL MOVZWL CLRL CALLS	DESC -(SP) 10SB #54 CHANNEL, -(SP) -(SP)	
		6B 57 07 57 12 7E	08		0 001FE 9 00201 C 00204 8 00208	MOVL BLBC MOVZWL BLBS MOVQ	-(SP) #12, SYS\$QIOW RO, STATUS STATUS, 14\$ IOSB, STATUS STATUS, 15\$ STATUS, -(SP) #SET\$_WRITEERR #3, FILE_ERROR	0570 0571 0572
0E	0000000G	00	00000000G	8F DI 03 FI 12 1 02 E	0 0020E B 00214 1 0021B 1 0021D 15\$:	PUSHL CALLS BRB BBC PUSHAB	#2. SETFILESFLAGS. 16\$	0574 0575
		6A	0000000G	01 DI 8F DI 03 FI 7E 7	D 00224 D 00226 B 0022C C 0022F 16\$:	PUSHL PUSHL CALLS CLRQ CLRQ CLRQ	DIR_DESC #1 #SET\$_MODIFIED #3, LIB\$SIGNAL -(\$P) -(\$P) -(\$P)	0579
		7E	E0 28 20	7E DO 7E 70 AE 90 AE 34 AE 36	F 00235 C 00238 F 0023A D 0023D C 0023F	PUSHAB CLRQ PUSHAB PUSHL MOVZWL	DESC -(SP) IOSB #52 CHANNEL, -(SP)	
		6B 7E	04	7E DO	8 00245 C 00248 17\$:	CLRL CALLS MOVZWL	-(SP) #12, SYS\$QIOW CHANNEL, -(SP)	0585

SETDIR VO4-000			D 2 16-Sep-1984 00:59:34 VAX-11 Bliss-32 V4.0-742 14-Sep-1984 12:09:06 [CLIUTL.SRC]SETDIR.B32;1	Page 22
	0000000G	00 57 10 7E	01 FB 0024C CALLS #1, SYS\$DASSGN 50 D0 00253 MOVL R0, STATUS 57 EB 00256 BLBS STATUS, 19\$ 57 7D 00259 MOVQ STATUS, -(SP)	0586
	0000000G	00000000G 50	8F DD 0025C PUSHL #SET\$ CLOSEERR 03 FB 00262 18\$: CALLS #3, FILE_ERROR 01 DO 00269 19\$: MOVL #1, RO 04 0026C RET	0589 0590

```
VAX-11 Bliss-32 V4.0-742
[CLIUTL.SRC]SETDIR.B32:1
                     0591
0592
0593
0594
0595
0596
0597
    ROUTINE get_dir (dir_desc) =
This routine is called to get each directory spec from the command line.
                                  When there are no more directories, a value of FALSE is returned.
                               BEGIN
                     0598
                     0599
                     MAP dir_desc : REF $BBLOCK;
                                     desc : $BBLOCK[dsc$c_s_bln],
                                                                                              ! General descriptor
                                                                                      End-of-directory character
                                     endchar : BYTE.
                                                                                      End of string
                                     eos,
                                                                                      Pointer in string
                                     ptr.
                                    str_ptr.
str_len,
                                                                                      Pointer to rest of string
Length of rest of string
                                     temp_string : VECTOR[nam$c_maxrss,BYTE],
                                                                                            ! The temporary string
                                     status:
   621234567890123456789012345678901234
                               IF .setfile$flags[qual_quit]
THEN RETURN false;
                                 Check here to see if a trailing ellipse is being treated. If so, then FILE_FAB[FAB$L_CTX] will be set to TRUE, and there's no need to search and see if such a trailing ellipse is present. However,
                                  if the value is set to FALSE, then get a new directory spec.
                               IF NOT .file_fab[fab$l_ctx]
                                                                                   ! If not processing an ellipse
                               THEN
                                                                                   ! then get the next directory
                                     IF NOT cli$get_value(%ASCID 'DIRECTORY', .dir_desc)
                                    THEN RETURN false:
                                    file_fab[fab$l_fna] = .dir_desc[dsc$a_pointer];
file_fab[fab$b_fns] = .dir_desc[dsc$w_length];
                                  Since this is a new entry, it must be checked for a trailing ellipse.
                                    CH$MOVE( .dir_desc[dsc$w_length], .dir_desc[dsc$a_pointer],
                                                                                      Move this many chars
                                                                                      from the CLI area
                                                temp_string);
                                                                                      To the temp string
                                    str_ptr = temp_string;
str_len = .dir_desc[dsc$w_length];
                                                                                      Set up pointer
                                                                                     and length.
                                  Look for ellipses.
                                    WHILE NOT CHSFAIL(temp = CHSFIND_SUB(.str_len, .str_ptr, 3, UPLIT('...')))
                                     DO
                                          BEGIN
                                          str_ptr = .temp + 3;
                                                                                   ! Update pointer
                                          str_len = .str_len - (.temp - .str_ptr) - 3;
```

```
VAX-11 Bliss-32 V4.0-742 [CLIUTL.SRC]SETDIR.B32;1
After the final ellipse, check to see if it is at the end of the directory specification. If so, then change the context field of
               the fab, and insert an end bracket at the beginning of the ellipse.
                   IF (.str_ptr EQL temp_string + .file_fab[fab$b_fns] -1)
                   THEN
                         BEGIN
                        file_fab[fab$l_ctx] = true;
CH$WCHAR(..str_ptr, .str_ptr - 3);
file_fab[fab$l_fna] = temp_string;
file_fab[fab$b_fns] = .str_ptr - 3
                                                                                         Show that there's a trailing ellipse
                                                                                         Put the end bracket in place
                                                                                         Set up FAB fields
                                                                              - temp_string + 1;
                        END:
                  END
               If here, then the trailing ellipse has been processed, and this is the
               second time thru. Restore the original file name.
            ELSE
                  file_fab[fab$l_fna] = .dir_desc[dsc$a_pointer];
file_fab[fab$b_fns] = .dir_desc[dsc$w_length];
file_fab[fab$l_ctx] = false;
                                                                                                     Original filename
                                                                                                     Original length
                                                                                                     Ellipse processed
                  END:
               Parse the input string
            $NAM_INIT (NAM = file_rlf):
If (.file_nam[nam$b_dev] NEQ 0)
                                                                                                     Re-init the RLF
If a device was
            THEN
                                                                                                   ! specified, then
                  file_fab[fab$l_dna] = .file_nam[nam$l_dev];
file_fab[fab$b_dns] = .file_nam[nam$b_dev];
                                                                                                  ! Make device sticky
            IF NOT (status = $PARSE(FAB = file_fab))
            THEN
                  desc[dsc$w_length] = .file_fab[fab$b_fns];
desc[dsc$a_pointer] = .file_fab[fab$[_fna];
SIGNAL_STOP(set$_syntax,
                                     1, desc, .status);
                  END:
               Check the parsed string for legality, i.e. nothing after the directory
           if (.file_nam[nam$b_name] NEQ 0 OR
    .file_nam[nam$b_type] NEQ 1 OR
    .file_nam[nam$b_ver] NEQ 1)
            THEN
                  desc[dsc$w_length] = .file_fab[fab$b_fns];
desc[dsc$a_pointer] = .file_fab[fab$[_fna];
SIGNAL_STOP(set$_syntax_
                                     1, desc, ss$_badirectory);
0704
                  END:
```

```
Check if a search list is used. If so SIGNAL, as search lists are not
                           allowed (for devices) in this application.
                        IF .file_nam[nam$v_search_list]
THEN
                             SIGNAL_STOP(set$_filspcsrch, 1, .dir_desc, set$_nosrchlst);
Determine what the directory terminator character was, and save it.
                        endchar = .(.file_nam[nam$l_dir] + .file_nam[nam$b_dir] - 1);
                           The directory string must now be analyzed and manipulated so that the
                          final directory entry becomes a file. First, initialize some pointers.
                       desc[dsc$w_length] = .file_nam[nam$b_esl] - 2;
desc[dsc$a_pointer] = .file_nam[nam$l_esa];
str_ptr = .desc[dsc$a_pointer];
str_len = .desc[dsc$w_length];
ptr = 0;
                        eos = .desc[dsc$a_pointer] + .desc[dsc$w_length] -1;
                          Look for wildcard ellipses
                        WHILE NOT CH$FAIL(temp = CH$FIND_SUB(.str_len, .str_ptr, 3, uplit('...')))
                             BEGIN
                          Make PTR point to the beginning of the "...", and advance the string pointer to the character just past the "..."
                             str_len = .str_len - (.temp - .str_ptr) -3;
                            str_ptr = .temp + 3;
END;
                          If there was any occurrence of "...", point just past it.
                        IF .ptr NEQ 0 THEN ptr = .ptr + 3;
                          find the last directory in the specification
                        WHILE NOT CH$FAIL( temp = CH$FIND_CH(.str_len, .str_ptr, '.'))
                             BEGIN
                          Make PTR point to the ".", and advance the string pointer to
               0756
0757
                           the first character after the
               0758
0759
0760
                             str_len = .str_len - (.temp - .str_ptr) - 1;
                             str ptr = .temp + 1;
END;
               0761
```

```
VAX-11 Bliss-32 V4.0-742 [CLIUTL.SRC]SETDIR.B32;1
IF .ptr NEQ 0
                                  BEGIN
                               If here, then either a trailing ellipse, or a final sub-directory was specified. If the pointer is at the bracket, then there is a trailing ellipse, in which case only a "*" is required.
                                  IF .ptr EQL .eos
                                  THEN
                                       BEGIN
                                       CH$A WCHAR('*', ptr);
ptr = .ptr + 1;
END
                                                                                     Stick an asterisk after the bracket.
                                                                                     Adjust the pointer.
                  0778
                               If the pointer is inside the bracket, then the last directory name
                  0779
                               must be moved out of the brackets.
                  0780
                                  ELSE
                                       BEGIN
                               Check to see if the directory is [main.sub] or [main...sub]
                                       IF .ptr EQLU .str_ptr THEN
                                           ! [m
str len = .eos - .ptr;
CH$MOVE(.str_len, .ptr, .ptr+1);
CH$WCHAR(.endchar, .ptr);
ptr = .ptr + .str_len + 1;
END
                                                                                   ! [main...sub] form
                                                                                   ! end of [main...sub] processing
                                       ELSE
                                            BEGIN
                                                                                   ! [main.sub] form
                                            str len = .eos - .str.ptr;
CH$WCHAR_A(.endchar, ptr);
                                            ptr = .ptr + .str_len;
                                                                                   ! end of [main.sub] processing
                                       END:
                                 END
                                                                                   ! End of non-zero pointer stuff
                            ELSE
                                  BEGIN
                               If the pointer is still zero, then there is either a wildcard, a main
                               directory, or a [g,m] directory. In all such cases, a main directory of [000000] must be fabricated.
                  0807
                  0808
                  0809
                                  status = CH$fIND_CH(.str_len, .str_ptr, ',');
                                                                                                        ! Save for later
                  0810
                 0811
0812
0813
0814
0815
0816
                               Move the string out seven spaces and insert "000000]"
                                  str_ptr = .desc[dsc$a_pointer] + .file_nam[nam$b_dev] + 1;
                                  temp = CH$MOVE(.eos - .str ptr .str ptr .str ptr + 7);
str ptr = CH$MOVE(6, UPLITT'000000'), .str ptr);
                                  CH$MOVE(1, endchar, .str_ptr);
                               If no comma was found, then all that is required is to update the
```

```
SETDIR
VO4-000
                                                                                                                                                                  VAX-11 Bliss-32 V4.0-742 [CLIUTL.SRC]SETDIR.B32;1
                                                                                                                                                                                                                                     Page
                                                pointer.
      If CHSFAIL(.status) THEN ptr = .temp
                                                 Otherwise, it's a [g,m] directory. Convert it.
                                                    ELSE
                                                            BEGIN
                                                            LOCAL tparse_block : $BBLOCK[tpa$k_length0];
                                                                                                                                                    ! Define a TPARSE block
                                                            CH$fILL(0, tpa$k_length0, tparse_block);
tparse_block[tpa$l_count] = tpa$k_count0;
                                                                                                                                                    ! Zero it.
! Fill in size
                                                            tparse_block[tpa$l_stringcnt] = .eos - .str_ptr;
tparse_block[tpa$l_stringptr] = .ser_ptr + 7;
If NOT (status = lib$tparse(tparse_block,
                                                                                                               dir_state,
dir_keys))
                                                            THEN SIGNAL_STOP(.status)
                                                            ELSE
                                                                   BEGIN
                                                                   LOCAL temp_desc : $BBLOCK[dsc$c_s_bln];
temp_desc[dsc$w_length] = 6;
temp_desc[dsc$a_pointer] = .str_ptr + 7;
If NOT (status = SYS$FAO($descriptor('!2(30W)'),
                                                                                                                 temp_desc.
                                                                                                                 temp_desc,
                                                                                                                  .group,
                                                                                                                   member))
                                                                   THEN SIGNAL_STOP(.status)
ELSE ptr = .str_ptr + 14;
                                                                   END:
                                                            END:
                                             ptr = CH$MOVE(4, UPLIT('.DIR'), .ptr);
file_fab[fab$b_fns] = .ptr - .desc[dsc$a_pointer];
file_fab[fab$l_fna] = .desc[dsc$a_pointer];
                                             RETURN true:
                                             END:
                                                                                                                                         .PSECT $PLIT$, NOWRT, NOEXE, 2
                                                                                                               00098 P.AAP:
000A4 P.AAO:
000A8
000AC P.AAQ:
000B0 P.AAR:
000B4 P.AAS:
000BC P.AAU:
000C3
000C4 P.AAT:
000C8
000C6 P.AAV:
                                                                                        52 49 44
010E0009
000000000
2E 2E 2E
2E 2E 2E
30 30 30
28 32 21
                                                                                                                                         .ASCII
                                                                                                                                                       \DIRECTORY\<0><0><0>
17694729
                                                    52
                                                          4F
                                                                  54
                                                                        43
                                                                                45
                                                                                                                                          ADDRESS P.AAP
                                                                                                                                                        \...\<0>
                                                                                                                                          .ASCII
                                                                                                                                                       \.\\\0>
\000000\\<0><0>
\!2(30\\)\
                                                                                                                                          .ASCII
                                                                                                                                          .ASCII
                                                                                                                                          .ASCII
                                                                                                                                          .BLKB
                                                                                                                                          . LONG
                                                                                                                                          .ADDRESS P.AAU
```

.ASCII

0681 0683

008A 00020 3\$: 00022 00028 DD 9F 0625 00000000. 0000000G 00 FB 00 98 9E 0002F 00032 0628 0629 0634 0637 0638 0642 0000000G 04 00 B6 5A 57 0000000G 0003A 00041 00047 04 34 0004B 0004E 48: 57 00000000 EF 6A 53 00059 DO 0005C 5\$: **5B** 0005E 0006 5A 5A 57 3(R11), STR PTR TEMP, STR PTR, R3 -3(R3)[STR\_LEN], STR\_LEN 0645 0646 AB 5B 00063 03 53 00067 SUBL 3 0006B MOVAB FD A347 DC 0642 00070 BRB 50 50 50 00000000G 00 33 AE40 FILE\_FAB+52, RO TEMP\_STRING-1[RO], RO 00072 65: MOVZBL 00079 MOVAB STR\_PTR, RO D1 12 0007E CMPL 0008 BNEQ #1, FILE FAB+24
-3(STR PTR), R1
(STR PTR), (R1)
TEMP\_STRING, FILE\_FAB+44
TEMP\_STRING, R0
R1, R0 0656 0657 Ō' 90 9E 9E 9E 00083 MOVL 0000000G 0008A MOVAB FD 0008E MOVB 00 50 50 01 0658 0659 0000000G 00091 MOVAB 00099 MOVAB 0009D SUBL 2 00000000G 00 000A0 SUBB3 RO. #1, FILE\_FAB+52 0622 0668 0669 0670 0676 8A000 BRB 4(R6), FILE FAB+44 (R6), FILE FAB+52 FILE FAB+24 #0, (SP), #0, #96, \$RMS\_PTR 90 94 20 0000000G 04 000AA 75: MOVL 00 0000000G 000B2 MOVB 0000000G 000B9 CLRL MOVC5 0060 8F 00 000BF 8\$: 6E 00000000 000C6 #24578, \$RMS\_PTR FILE\_NAM+57, RO 000CB 00000000 MOVW 0000B 0000B 0000D 000E8 000EF 000F5 0677 0000000G MOVZBL BEQL FILE\_NAM+68, FILE\_FAB+48
RO, FILE\_FAB+53
FILE\_FAB
#1, SYS\$PARSE
RO, STATUS 90 9F 0680 0000000G 00000000G MOVL

MOVB

**PUSHAB** 

CALLS

MOVL

FEC4

03 00000000G

02F8

03 00000000G

0000000G

0000000G

0000000G

6E

6A

		K 2 16-Sep-1984 00:59:34 VAX-11 Bliss-32 V4.0-742 14-Sep-1984 12:09:06 [CLIUTL.SRC]SETDIR.B32;1	Page 29 (8)
F8 FC	24 AD 0000000006 AD 000000006 F8 A 00 007710FA 8 000000006	E8 000FF BLBS STATUS, 10\$ 9B 00102 MOVZBW FILE_FAB+52, DESC D0 0010A MOVL FILE_FAB+44, DESC+4 DD 00112 PUSHL STATUS 9F 00114 PUSHAB DESC	0686 0687 0689 0688
	F8 A 0 007710FA 8	DO 0010A	0688
0000000G	00 00000000	DD 00119 PUSHL #7803130 FB 0011F CALLS #4, LIB\$STOP 95 00126 10\$: TSTB FILE_NAM+59 12 0012C BNEQ 11\$	0695
		12 0012C BNEQ 11\$ 91 0012E CMPB FILE_NAM+60, #1 12 00135 BNEQ 11\$	0696
	01 000000006 0	12 00135 BNEQ 11\$ 91 00137 CMPB FILE_NAM+61, #1 13 0013E BEQL 12\$	0697
F8 FC	01 000000006 00 01 000000006 00 AD 000000006 00 AD 000000006 00 7E 0828 8 F8 A	BLBS STATUS, 10\$ 9B 00102 MOVZBW FILE_FAB+52, DESC DO 0010A MOVL FILE_FAB+44, DESC+4 DD 00112 PUSHL STATUS 9F 00114 PUSHL M7 DD 00117 PUSHL M7 DD 00119 FB 0011F 95 00126 10\$: TSTB FILE_NAM+59 12 0012C BNEQ 11\$ 12 00135 GMPB FILE_NAM+60, M1 12 00137 CMPB FILE_NAM+61, M1 13 0013E BNEQ 11\$ 9B 00140 11\$: MOVZBW FILE_FAB+52, DESC DO 00148 MOVZWL M2088, -(SP) 9F 00155 PUSHA MOVZWL M2088, -(SP) 9F 00156 PUSHA M1 DD 0015A FB 00160 CALLS M4, LIB\$STOP E1 00167 12\$: BBC M3, FILE_NAM+53, 13\$	0700 0701 0702
00000000G 17 0000000G	007710FA 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DO 00148 3C 00150 9F 00155 PUSHAB DESC DD 00158 PUSHL #1 DD 0015A FB 00160 E1 00167 12\$: BBC #3, FILE NAM+53, 13\$ DD 00175 DD 00175 DD 00175 PUSHL #7803730 PUSHL #6 DD 00177 DD 00177 PUSHL #1 DD 00179 FB 00177 PUSHL #7803722 CALLS #4, LIB\$STOP FB 00177 PUSHL #1 PUSHL #7803722 CALLS #4, LIB\$STOP FB 00179 FB 00179 FB 00179 FB 00186 13\$: MOVZBL FILE NAM+58, RO CO 00180 MOVZBL FILE NAM+72, RO 90 00194 MOVB -1(RO), ENDCHAR PB 00199 A2 001A1 BOVZBW FILE NAM+11, DESC SUBW2 #2, DESC MOVL FILE NAM+12, DESC+4 DO 001A5 MOVL DESC*44, R9	0709
	00771352 8	DD 0016F PUSHL #7803730 PUSHL R6	0711
000000006	00 0077134A 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DD 0016F DD 00175 DD 00177 DD 00177 DD 00179 FB 0017F 9A 00186 13\$: MOVZBL FILE_NAM+58, RO CO 0018D ADDL2 FILE_NAM+72, RO 90 00194 MOVB -1(RO), ENDCHAR 9B 00199 MOVZBW FILE_NAM+11, DESC A2 001A1 SUBW2 W2, DESC DO 001A5 MOVL FILE_NAM+12, DESC+4 DO 001A5 MOVL FILE_NAM+12, DESC+4 DO 001A5 MOVL DESC, RO DO 001B1 MOVL R9, STR_PTR 3C 001B4 MOVZWL DESC, RO DO 001B8 MOVL R0, STR_LEN CLRL PTR 9E 001BD MOVAB -1(RO)[R9], EOS 39 001C2 14\$: MATCHC W3, P.AAR, STR_LEN, (STR_PTR) 13 001CB	0715
04 F8 F8	AE	00 0018D ADDL2 FILE_NAM+72, R0 90 00194 MOVB -1(R0), ENDCHAR 9B 00199 MOVZBW FILE_NAM+11, DESC A2 001A1 SUBW2 #2, DESC	0721
FC	59 FC A	DO 001A5 MOVL FILE NAM+12, DESC+4 DO 001AD MOVL DESC+4, R9 DO 001B1 MOVL R9, STR PTR	0722 0723
	5A 50 57 56 FF A04	00 001B1 MOVL R9, STR_PTR 3C 001B4 MOVZWL DESC, R0 D0 001B8 MOVL R0, STR_LEN	0724
57 00000000°	56 FF A04	DO 001B1 3C 001B4 MOVL R9, STR_PTR DO 001B8 MOVL R0, STR_LEN CLRL PTR PE 001BD MOVAB -1(R0)[R9], EOS 39 001C2 14\$: MATCHC #3, P.AAR, STR_LEN, (STR_PTR) 13 001CB BEQL 15\$ DO 001CD MOVL #3, R3 D7 001D0 15\$: DECL R3 3E 001D2 MOVAW -(R3), TEMP 13 001D5 BEQL 16\$ DO 001D7 MOVL TEMP, PTR C3 001DA SUBL3 TEMP, STR_PTR, R3 PE 001DE MOVAB -3(R3)[STR_LEN], STR_LEN PE 001E3 MOVAB 3(R11), STR_PTR 11 001E7 BRB 14\$	0725 0726 0731
	53 0	39 001C2 14\$: MATCHC #3, P.AAR, STR_LEN, (STR_PTR) 13 001CB BEQL 15\$ D0 001CD MOVL #3, R3 D7 001D0 15\$: DECL R3 3E 001D2 MOVAW -(R3), TEMP	
	5B 7	3E 001D2 MOVAW -(R3), TEMP 13 001D5 BEQL 16\$	
53	5B 7 58 5 57 FD A34 5A 03 A	DO 001D7 MOVL TEMP, PTR C3 001DA SUBL3 TEMP, STR PTR, R3	0738 0739
	57 FD A34	DO 001B8 04 001BB 05 001BD 06 001BD 07 001C2 08 001C2 09 001C2 09 001C2 09 001C3 09 001C3 00 001C5 00	0740 0731 0746
6A	5A 03 A 50 58 57 58 57	DO 001B1 3C 001B4 DO 001B8 DO 001BB DO 001BB OCH PTR PE 001BD MOVAB -1(RO)[R9], EOS MOVL W3, P.AAR, STR_LEN, (STR_PTR) BEQL 15\$ DO 001CD MOVL W3, R3 D7 001D0 15\$: DECL R3 BEQL 16\$: DO 001D7 MOVAW -(R3), TEMP BEQL 16\$: DO 001D7 MOVL TEMP, PTR C3 001DA SUBL3 TEMP, STR_PTR, R3 PE 001E3 MOVAB -3(R3)[STR_LEN], STR_LEN MOVAB 3(R11), STR_PTR BRB 14\$ DO 001E7 DS 001E9	0751
	5B 5	D4 001F6 CLRL R1 D0 001F8 18\$: MOVL R1, TEMP	

TDIR 4-000						1	5-Sep-1 4-Sep-1	984 00:59: 984 12:09:		Page (
		53	58 5A 57 5A	FF A	12 58 58 347 AB E1	13 001FB 00 001FD C3 00200 9E 00204 9E 00209 11 00200		BEQL MOVAB MOVAB MOVAB BRB TSEQL CMPL BNEQ INCL BNEQ INCL BNEQ SUBL3 MOVAB SUBL3 MOVB BRB SUBL3 MOVB SUBL3 MOVAB S	19\$ TEMP, PTR TEMP, STR PTR, R3 -1(R3)[STR_LEN], STR_LEN 1(R11), STR_PTR 17\$	07 07 07 07 07
			56		32 58 07	05 0020F 13 00211 01 00213 12 00216	19\$:	BEQL CMPL BNEQ	PTR 22\$ PTR, EOS 20\$	07
			88 5A		2A 5F 58	90 0021A 11 0021D D1 0021F	20\$:	MOVB BRB CMPL	PTR #42, (PTR)+ 24\$ PTR, STR_PTR	07 07 07
	01	57 A8	56 68 68 58	04 01 A	58 57 AE 748	28 00228 90 00220 9E 00231		SUBL3 MOVC3 MOVB	17\$ PTR 22\$ PTR, EOS 20\$ PTR #42, (PTR)+ 24\$ PTR, STR_PTR 21\$ PTR, EOS, STR_LEN STR_LEN, (PTR), 1(PTR) ENDCHAR, (PTR) 1(STR_LEN)[PTR], PTR 24\$ STR_PTR, EOS, STR_LEN ENDCHAR, (PTR)+ STR_LEN, PTR 24\$ #44, STR_LEN, (STR_PTR)	07 07 07
		57	56 88 58	04	46 5A AE 57	11 00236 C3 00238 90 0023C C0 00240	215:	BRB SUBL3 MOVB ADDL2	24\$ STR_PTR, EOS, STR_LEN ENDCHAR, (PTR)+ STR_LEN, PTR	07 07 07 07 07 07 07
		6A	57		39 20 02 51	11 00243 3A 00245	22\$:	BRB LOCC BNEQ	23\$	07
		50	6E 50 5A 56	00000000G 01 A	51 00 049 5A	12 00249 04 00248 00 00240 9A 00250 9E 00257 03 00250 28 00260	23\$:	MOVL MOVZBL MOVAB SUBL3	R1, STATUS FILE_NAM+57, R0 1(R0)[R9], STR_PTR STR_PTR, ÉOS, R0 R0, (STR_PTR), 7(STR_PTR) R3, TEMP #6, P.AAS, (STR_PTR) R3, STR_PTR ENDCHAR, (STR_PTR) STATUS 25\$ TEMP, PTR	00
	07	50 AA 6A 00000000	5B		06 53	28 00260 00 00265 28 00268 00 00270		MOVC3 MOVL MOVC3 MOVL	RO, (STR_PTR), 7(STR_PTR) R3, TEMP #6, P.AAS, (STR_PTR) R3, STR_PTR	00
			6A 58	04	AE 6E 05 5B	90 00273 05 00277 12 00279 00 00278		MOVE MOVE MOVE MOVE TSTL BNEQ MOVE BRB MOVE	ENDCHAR, (STR_PTR) STATUS 25\$ TEMP, PTR	08
24		00	6E	10	70 00 AE 08	11 0027E 2C 00280 00285	24 <b>\$</b> : 25 <b>\$</b> :	MOVC5	#0, (SP), #0, #36, TPARSE_BLOCK	08
	18	AE 10	AE 56 53 AE	07	2A	DO 00287 C3 00288 9E 00290 DO 00294 9F 00298		MOVL SUBL3 MOVAB MOVL	#8, TPARSE_BLOCK STR_PTR, EOS, TPARSE_BLOCK+8 7(RTO), R3 R3, TPARSE_BLOCK+12 DIR_KEYS DIR_STATE TPARSE_BLOCK #3, LIBSTPARSE	08 08 08
		0000000		000000000:	AA SS EF EF AE OS	9F 0029E 9F 002A4 FR 002A7		PUSHAB PUSHAB PUSHAB CALLS	DIR_KEYS DIR_STATE TPARSE_BLOCK #3. LIBSTPARSE	00
		080000	6E 2D		50 6E 06	DO 002AE E9 002B1 B0 002B4		MOVL SUBL 3 MOVAB MOVL PUSHAB PUSHAB CALLS MOVL BLBC MOVW MOVL PUSHL PUSHL PUSHAB	RO, STATUS STATUS, 26\$ #6, TEMP_DESC R3, TEMP_DESC+4 MEMBER GROUP TEMP_DESC	01
				00000000G 00000000G	00 00 AE	BÓ 002B4 DO 002B8 DD 002BC DD 002C2 9F 002C8		PUSHL PUSHL PUSHAR	MEMBER GROUP TEMP DESC	00 00 00 00

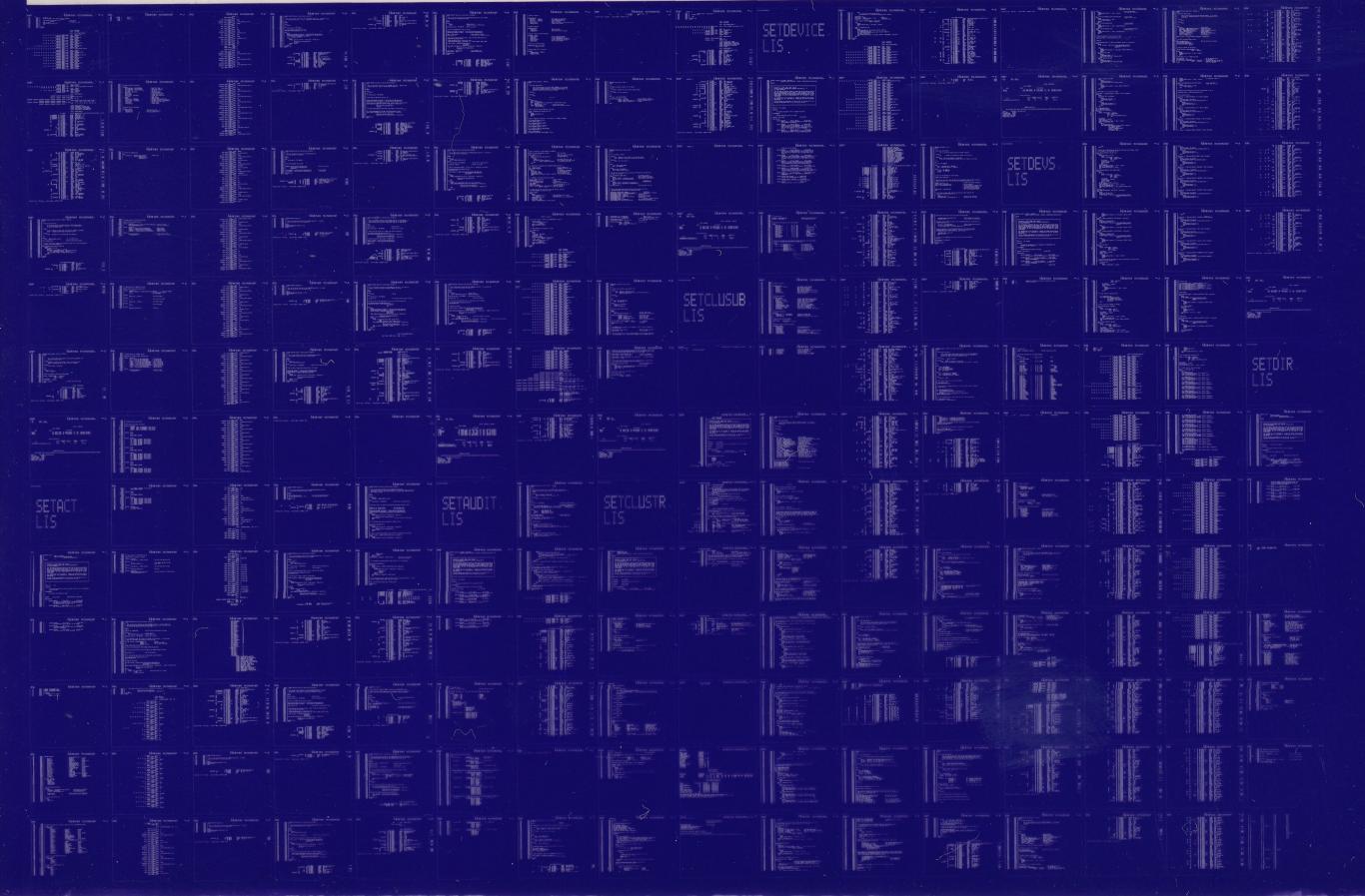
SETDIR V04-000							1	2 -Sep-19 -Sep-19	984 00:59 984 12:09	:34	VAX-11 Bliss-32 V4.0-742 [CLIUTL.SRCJSETDIR.B32;1	Page	e 31 (8)
	0000000G	0000	00000G 0 00000G 0 500000G 0	0 00000000.	AEF550EEE14AFF991 50	9FB08DB190300444	002CB 002CE 002DB 002DE 002EE3 002EF0 002F7 0030C	26\$: 27\$: 28\$:	PUSHAB PUSHAB CALLS MOVL BLBS PUSHL CALLS BRB MOVAB MOVL SUBB3 MOVL RET CLRL RET	M1 L	YS\$FAO TATUS		0849 0850 0854 0855 0856 0858

; Routine Size: 781 bytes, Routine Base: \$CODE\$ + 03CF

Size: 1756 code + 324 data bytes
Run Time: 00:32.7
Elapsed Time: 01:40.0
Lines/CPU Min: 1581
Lexemes/CPU-Min: 25423
Memory Used: 274 pages
Compilation Complete

0052 AH-BT13A-SE

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